

**Table A1. Topics Covered in the Program**

Workshop Overview						
	Week1	Week2	Week3	Week4	Week5	Week6
Overview of self-management and diabetes	➡					➡
Introduction to diabetes	➡					
Understanding your numbers: Glucose, blood pressure, body mass index	➡					➡
Healthy Eating	➡	➡	➡	➡		
Making an action plan	➡	➡	➡	➡	➡	➡
Feedback/problem-solving		➡	➡	➡	➡	➡
Diabetes self-management wheel		➡				
Glucose monitoring		➡	➡			
Exercise		➡				
Difficult emotions				➡		
Using your mind to manage symptoms/stress				➡	➡	
Weight control				➡		
Hypoglycemia (low blood glucose)				➡		
Depression				➡		
Relationships with family					➡	
Working with the health care system					➡	
Medications					➡	
Sick days						➡
Future plans						➡

**Table A2. Demographic Values, by American Indian/Alaska Natives or non AI/NA**

Outcome Variable	Non AI/AN					American Indian/ Alaska Natives					All participants				
	Control N=220	no reinfrc.	Treatment With reinfrc	(all)	P, Control versus Treatment	Control	no reinfrc.	Treatment With reinfrc.	(all)	P, Control versus Treatment	Control	no reinfrc.	Treatment With reinfrc.	(all)	P, Control versus Treatment
		N=31	N=29	N=431		N=50	N=31	N=29	N=60		N=270	N=259	N=232	N=491	
Age	55.0 (10.7)	55.1 (10.1)	54.2 (9.85)	54.7 (9.96)	.699	51.9 (9.42)	50.5 (7.62)	50.5 (9.85)	50.5 (8.69)	.430	54.4 (10.6)	54.6 (9.90)	53.8 (9.90)	54.2 (9.90)	.736
Percent Married	66.4	67.1	69.5	68.2	.634	64.0	58.1	44.8	51.7	.786	65.9	66.0	66.4	66.2	.941
Education (years)	16.0 (3.07)	15.6 (2.98)	15.9 (2.98)	15.7 (2.98)	.307	14.8 (2.81)	15.3 (2.38)	16.0 (2.73)	15.6 (2.56)	.105	15.8 (3.06)	15.6 (2.92)	15.9 (2.94)	15.7 (2.93)	.842
Percent non-Hispanic White	87.3	87.3	90.6	88.9	.551	-	-	-	-	-	71.1	76.8	79.3	78.0	<b>.034</b>
Percent Male	30.5	23.3	31.5	27.1	.376	22.0	22.6	17.2	20.0	.800	28.9	23.2	29.7	26.3	.439

**Table A3. Baseline, All Participants**

Outcome Variable	Control N=270	Treatment, no reinforcement (T) N=259	Treatment & reinforcement (R) N=232	Treatment combined T plus R N=491	T vs. Control P	R vs. Control P	R vs. T P	C vs. R+T P
A1c ↓	6.40 (1.32)	6.50 (1.31)	6.43 (1.02)	6.47 (1.18)	.405	.785	.532	.736
Health Distress (0-5)↓	2.08 (1.18)	1.98 (1.17)	1.92 (1.10)	1.95 (1.14)	.375	.138	.555	.941
Activity Limitation (0-4)↓	1.22 (1.07)	1.09 (1.02)	1.10 (1.04)	1.10 (1.03)	.167	.198	.962	.842
PHQ Depression (0-27) ↓	7.97 (6.46)	7.47 (5.89)	7.14 (5.24)	7.32 (5.58)	.350	.112	.515	<b>.034</b>
PAM Patient Activation (0-100) ↑	64.5 (14.4)	64.5 (14.3)	65.7 (14.6)	64.9 (14.4)	.995	.369	.370	.439
Self Efficacy (1-10) ↑	7.97 (1.86)	6.78(2.11)	6.92 (1.88)	6.85 (2.00)	.949	.338	.410	.495
Aerobic exercise (min/week)↑	104.1 (140)	93.6 (116)	103.8 (155)	98.4 (136)	.348	.980	.417	.175
Physician Visits (last 6 months)	3.38 (3.20)	3.36 (3.47)	3.65 (2.96)	3.49 (3.24)	.949	.339	.329	.121

**Table A4 6-Month Completers and Non-completers**

Baseline Variable	Completed 6-month N=633	Did not complete 6-month N=128	P	Non-Completers		
				Treatment N=96	Control N=32	P
Age	54.7 (10.2)	52.3 (9.79)	<b>.015</b>	53.1 (9.40)	49.9 (10.7)	.117
Percentage Married	57.8	67.8	<b>.030</b>	55.2	65.6	.305
Education (years)	15.8 (3.03)	15.6 (2.66)	.550	15.8 (2.70)	15.0 (2.48)	.162
Percent non-Hispanic White	78.5	60.9	<b>&lt;.001</b>	63.5	53.1	.299
Percent Male	26.7	29.7	.489	32.3	21.9	.268
A1c ↓	6.68 (1.61)	6.89 (1.63)	<b>.001</b>	6.72 (1.82)	6.94 (1.57)	.506
Health Distress (0-5)↓	2.22 (1.25)	1.94 (1.13)	<b>.014</b>	2.17 (1.24)	2.38 (1.30)	.419
Activity Limitation (0-4)↓	1.11 (1.01)	1.31 (1.01)	.074	1.25 (1.14)	1.47 (1.30)	.371
PHQ Depression (0-27) ↓	7.46 (5.97)	7.97 (5.65)	.379	8.14 (6.66)	7.47 (6.66)	.565
PAM Patient Activation (0-100) ↑	64.6 (14.4)	66.1 (14.6)	.286	66.0 (14.4)	66.4 (15.2)	.892
Self Efficacy (1-10) ↑	6.82 (1.97)	6.82 (1.89)	.994	6.76 (1.97)	6.98 (1.68)	.581
Aerobic exercise (min/week)↑	99.8 (139)	103.6 (129)	.781	151.1(161)	87.7 (112)	<b>.046</b>
Physician Visits (last 6 months)	3.43 (3.24)	3.56 (3.17)	.682	3.41 (2.84)	4.03 (4.00)	.419

**Table A5 18-Month Completers and Non-completers**

Baseline Variable	Completed 18-month N=528	Did not complete 18-month N=123	P	Non-Completers		
				Treatment N=89	Control N=34	P
Age	55.3 (10.1)	52.8 (10.6)	<b>.015</b>	53.6 (10.5)	50.7 (10.7)	.169
Percentage Married	68.2	65.0	.503	62.9	70.6	.429
Education (years)	15.8 (2.98)	15.9 (3.15)	.926	16.3 (3.11)	15.7 (3.17)	.374
Percent non-Hispanic White	89.4	83.7	.118	85.4	79.4	.426
Percent Male	28.0	29.3	.784	32.6	20.6	.194
A1c ↓	6.29 (1.03)	6.68 (1.61)	<b>.010</b>	6.76 (1.55)	6.49 (1.78)	.422
Health Distress (0-5)↓	1.90 (1.13)	2.22 (1.27)	<b>.006</b>	2.16 (1.12)	2.36 (1.15)	.380
Activity Limitation (0-4)↓	1.08 (0.999)	1.27 (1.17)	.102	1.17 (1.08)	1.53 (1.37)	.125
PHQ Depression (0-27) ↓	7.19 (5.81)	8.28 (6.19)	.064	7.70 (5.50)	9.82 (7.60)	.143
PAM Patient Activation (0-100) ↑	64.7 (14.3)	66.9 (14.1)	.115	67.5 (14.4)	65.4 (13.4)	.468
Self Efficacy (1-10) ↑	6.87 (1.92)	6.85 (1.94)	.931	6.90 (2.00)	6.72 (1.82)	.645
Aerobic exercise (min/week)↑	102 (139)	107 (149)	.703	105 (155)	113 (135)	.795
Physician Visits (last 6 months)	3.52 (3.24)	3.32 (2.81)	.516	3.33 (2.49)	3.29 (3.69)	.963

**Table A6 Eighteen Month Changes**

Outcome Variable	Control Mean (SD)  N=186	Treatment Mean (SD)  N=342	Control vs. Treatment		
			Effect Size	P	P (intent to treat)
Health Distress (0-5)↓	-0.296 (1.12)	-0.312 (1.02)	0.014	.393	.510
Activity Limitation (0-4)↓	0.043 (1.06)	-0.031 (0.970)	0.012	.993	.489
PHQ Depression (0-27) ↓	-1.35 (4.48)	-1.19 (4.43)	-0.027	.994	.585
PAM Patient Activation (0-100) ↑	4.90 (13.8)	7.57 (14.9)	0.187	<b>.016</b>	.052
Self Efficacy (1-10) ↑	-0.001 (1.76)	0.280 (1.83)	0.146	<b>.007</b>	<b>.002</b>
Aerobic exercise (min/week)↑	-0.575 (196)	2.041 (150)	0.179	.827	.873
Physician Visits (last 6 months)	-0.634 (2.68)	-0.292 (3.50)	0.107	.095	.067

Notes: Effect Sizes are computed as the difference in change scores between treatment and control groups divided by the pooled baseline standard deviation. Negative effect sizes indicate that the control group did better than the treatment group.

**Table A7 Six Month Reinforcement Comparison**

Outcome Variable	Unreinforced Mean (SD)  N=209	Reinforced Mean (SD)  N=186	Unreinforced vs. Reinforced	
			Effect Size	P value
A1c ↓	-0.034 (0.844)	0.018 (0.862)	-0.044	.539
Health Distress (0-5)↓	-0.348 (1.03)	-0.082 (0.988)	-0.234	<b>.007</b>
Activity Limitation (0-4)↓	-0.019 (0.869)	0.009 (0.983)	-0.010	.719
PHQ Depression (0-27) ↓	-1.072 (4.44)	-0.398 (4.03)	-0.120	.117
PAM Patient Activation (0-100) ↑	6.24 (14.5)	5.09 (14.3)	-0.080	.897
Self Efficacy (1-10) ↑	0.321 (1.99)	0.160 (1.73)	-0.081	.836
Aerobic exercise (min/week)↑	12.09 (146)	1.41(167)	-0.079	.968
Physician Visits (last 6 months)	-0.121 (3.54)	-0.024 (3.56)	0.097	.990

Notes: Effect Sizes are computed as the difference in change scores between treatment and control groups divided by the pooled baseline standard deviation. Negative effect sizes indicate that the control group did better than the treatment group.

**Table A8 Eighteen Month Reinforcement Comparison**

Outcome Variable	Unreinforced Mean (SD)	Reinforced Mean (SD)	Unreinforced vs. Reinforced	
	N=202	N=174	Effect Size	P value
Health Distress (0-5)↓	-0.434 (1.11)	-0.227 (0.960)	-0.181	.079
Activity Limitation (0-4)↓	-0.121 (0.943)	0.009 (0.993)	-0.126	.157
PHQ Depression (0-27) ↓	-1.85 (4.74)	-0.609 (4.15)	-0.222	<b>.018</b>
PAM Patient Activation (0-100) ↑	9.06 (15.2)	6.08 (14.3)	-0.207	.170
Self Efficacy (1-10) ↑	0.412 (1.97)	0.229 (1.70)	-0.092	.713
Aerobic exercise (min/week)↑	6.049 (141)	-0.676 (152)	-0.049	.986
Physician Visits (last 6 months)	-0.463 (3.17)	-0.193 (3.74)	0.084	.113

Notes: Effect Sizes are computed as the difference in change scores between treatment and control groups divided by the pooled baseline standard deviation. Negative effect sizes indicate that the control group did better than the treatment group.

**Table A9 Six-Month Change, Participants with baseline A1c of 7 and above**

Outcome Variable	Control Mean (SD)	Treatment Mean (SD)	Control vs. Treatment	
	N=46	N=73	Effect Size	P value
A1c ↓	-0.063 (1.38)	-0.677 (1.42)	0.499	<b>.010</b>
Health Distress (0-5)↓	-0.364 (0.923)	-0.281 (1.22)	-0.072	.723
Activity Limitation (0-4)↓	-0.076 (1.02)	-0.106 (0.984)	0.029	.585
PHQ Depression (0-27) ↓	-1.30 (4.88)	-1.23 (4.16)	-0.012	.582
PAM Patient Activation (0-100) ↑	3.02 (13.1)	3.52 (14.3)	0.035	.116
Self Efficacy (1-10) ↑	0.022 (2.03)	0.087 (2.22)	0.033	<b>.040</b>
Aerobic exercise (min/week)↑	-16.17 (112)	-3.35 (109)	0.094	.106
Physician Visits (last 6 months)	0.413 (1.88)	-0.282 (3.06)	0.216	.735

Note: Effect Sizes are computed as the difference in change scores between treatment and control groups divided by the pooled baseline standard deviation. Negative effect sizes indicate that the control group did better than the treatment group.

**Table A10. Six-Month Change Scores, Non AI/AN Participants Only**

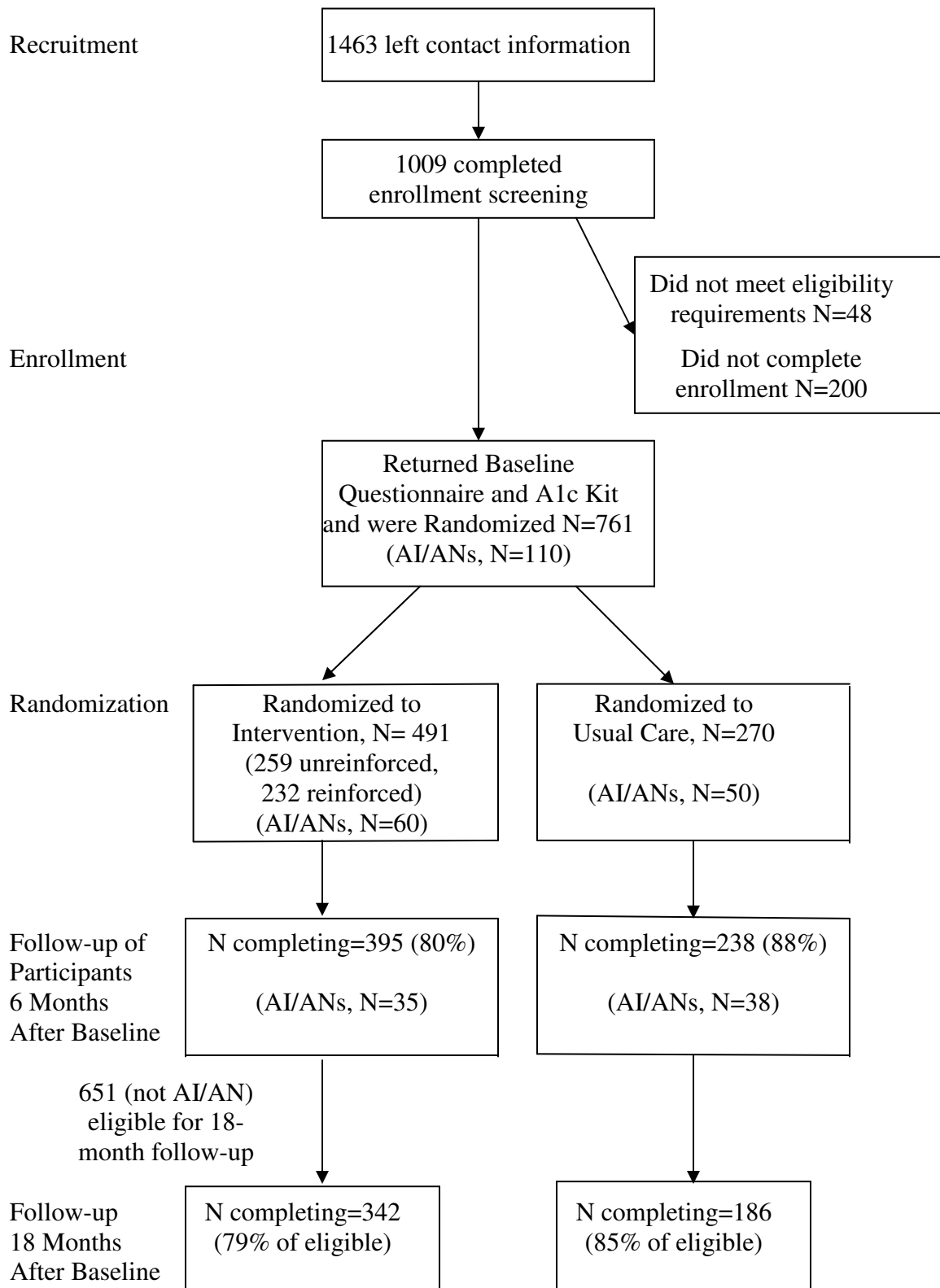
Outcome Variable	Control	Treatment, no reinforcement	Treatment & reinforcement	T vs. Control		R vs. Control		R vs. T		C vs. R+T	
	N=200	(T) N=191	(R) N=169	P ITT	P actual	P ITT	P actual	P ITT	P actual	P ITT	P actual
HbA1c	0.112 (0.741)	0.037 (0.812)	-0.038 (0.817)	.159	.066	.310	.377	.721	.371	.158	<b>.045</b>
Health Distress	-0.278 (0.864)	-0.295 (1.00)	-0.040 (0.994)	.653	.377	<b>.020</b>	.054	<b>.005</b>	<b>.006</b>	.307	.587
Activity Limitation	0.022 (0.850)	-0.003 (0.835)	0.043 (0.999)	.532	.480	.950	.870	.583	.605	.681	.604
PHQ Depression	-0.855 (3.82)	-1.037 (4.16)	-0.260 (4.10)	.480	.302	.285	.402	.077	.069	.866	.876
PAM	3.47 (14.0)	6.27 (14.8)	5.43 (14.3)	.051	<b>.036</b>	.135	.062	.685	.861	<b>.045</b>	<b>.021</b>
Self Efficacy	-0.231 (1.76)	0.360 (1.94)	0.094 (1.67)	<b>&lt;.001</b>	<b>&lt;.001</b>	<b>.007</b>	<b>.005</b>	.272	.272	<b>&lt;.001</b>	<b>&lt;.001</b>
Aerobic Exercise (min/week)	-2.975 (132)	11.101 (149)	0.125 (171)	.496	.318	.820	.456	.662	.823	.592	.307
Physician Visits	-0.111 (3.45)	-0.191 (3.43)	-0.389 (3.58)	.781	.826	.800	.762	.987	.930	.758	.761



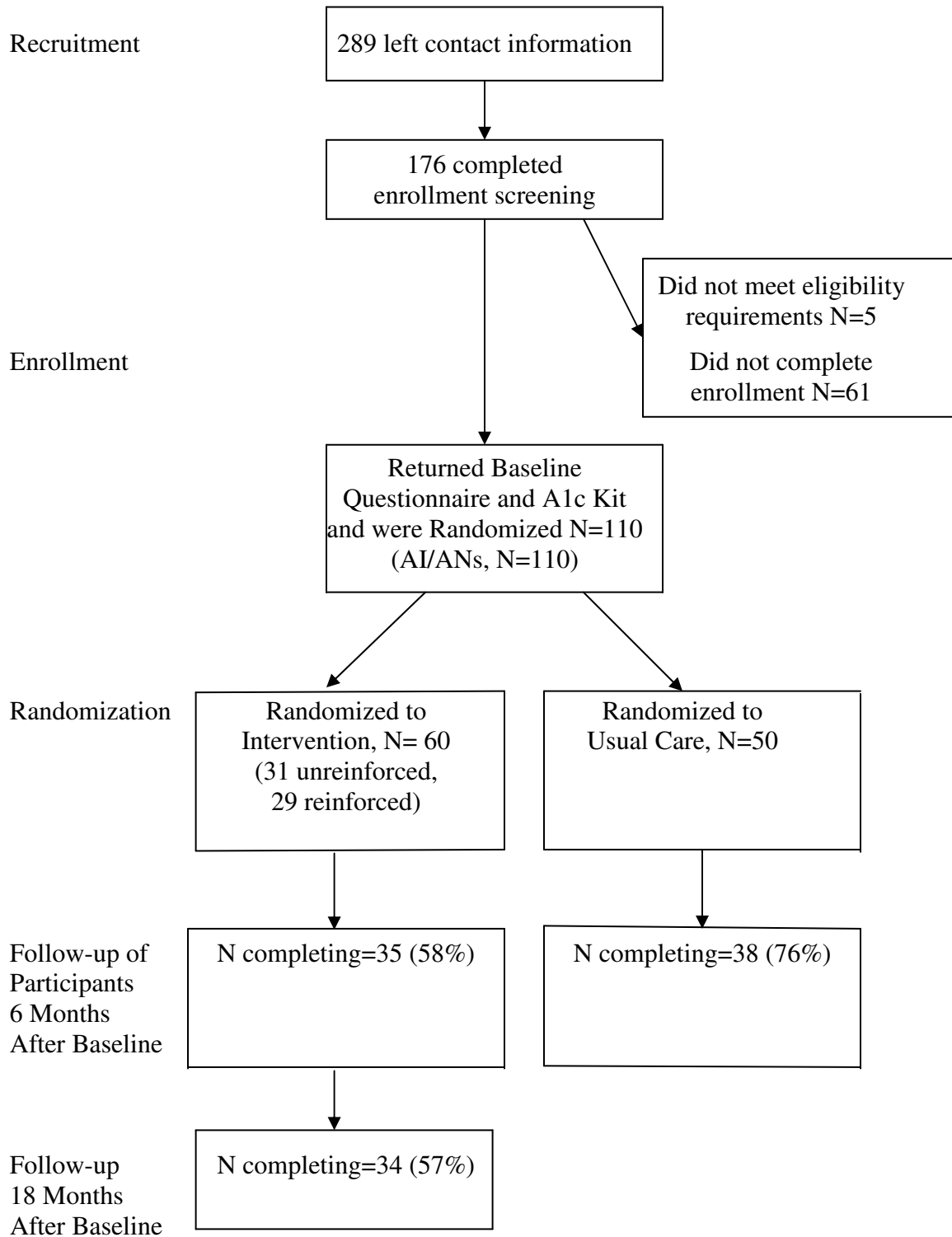
**Table A11 Six-Month Change Scores, AI/AN Participants**

Outcome Variable	Control (C)	Treatment, no reinforcement	Treatment & reinforcement	T vs. Control		R vs. Control		R vs. T		C vs. R+T	
	N=38	(T) N=18	(R) N=17	P ITT	P actual	P ITT	P actual	P ITT	P actual	P ITT	P actual
HbA1c	0.206 (0.973)	0.025 (1.21)	-0.186 (1.30)	.694	.716	.173	.300	.371	.574	.297	.379
Health Distress	-0.151 (0.730)	-0.917 (1.11)	-0.500 (0.833)	<b>.020</b>	<b>.003</b>	.186	.079	.404	.288	<b>.025</b>	<b>.004</b>
Activity Limitation	0.092 (0.843)	-0.194 (1.18)	-0.324 (0.754)	.102	.068	<b>.041</b>	<b>.024</b>	.659	.696	<b>.028</b>	<b>.012</b>
PHQ Depression	-0.737 (3.84)	-1.444 (6.93)	-1.756 (3.05)	.878	.405	.576	.232	.703	.734	.677	.214
PAM	4.47 (6.4)	5.88 (11.9)	1.50 (14.7)	.845	.712	.506	.850	.661	.889	.612	.722
Self Efficacy	-0.056(1.40)	-0.090 (2.52)	0.816 (2.25)	.418	.263	.266	<b>.036</b>	.084	<b>.007</b>	.896	.584
Aerobic Exercise (min/week)	3.32 (118)	23.12 (106)	14.12 (121)	.956	.952	.688	.650	.749	.659	.789	.810
Physician Visits	-0.658(.86)	0.611 (4.54)	1.26 (3.07)	.145	.148	.072	<b>.017</b>	.702	.387	.052	<b>.019</b>

**FIGURE A1. Participants in Randomized Trial and Longitudinal Follow-up**



**FIGURE A2. American Indian/Alaskan Native Participants in Randomized Trial and Longitudinal Follow-up**



**FIGURE A3. Participants in Reinforcement Study**

